

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Addiese: COMMISSIONER FOR PATENTS P O Box 1450 Alexandra, Virginia 22313-1450 www.wepto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|--|-------------|----------------------|---------------------|-----------------|
| 10/629,842 | 07/30/2003 | Hiroto Yoshikawa | 43890-544 | 3723 |
| 7550 03/31/2008 McDERMOTT, WILL & EMERY | | | EXAMINER | |
| 600 13th Street, N.W. | | | KISS, ERIC B | |
| Washington, DC 20005-3096 | | | ART UNIT | PAPER NUMBER |
| | | | 2192 | |
| | | | | |
| | | | MAIL DATE | DELIVERY MODE |
| | | | 03/31/2008 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/629.842 YOSHIKAWA ET AL. Office Action Summary Examiner Art Unit Eric B. Kiss 2192 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 20 December 2007. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1.4.5.8-12.15 and 18-40 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 1,4,5,8-12,15 and 18-40 is/are rejected. 7) Claim(s) _____ is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on is/are; a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abevance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date. Notice of Draftsperson's Patent Drawing Review (PTO-948)

information Disclosure Statement(s) (PTO/S5/06)
 Paper No(s)/Mail Date ______.

5) Notice of Informal Patent Application

6) Other:

Art Unit: 2192

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

 A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 20, 2007, has been entered. Claims 1, 4, 5, 8-12, 15, and 18-40 are pending.

Response to Arguments

Applicant's arguments filed December 20, 2007, have been fully considered but they are not persuasive.

Although, Pleso (in col. 1, lines 43-54) distinguishes a device driver from a specific separate application, Pleso does not suggest that device drivers themselves are not applications. To the contrary, Pleso discloses that the device drivers may be JAVA applications (see col. 13, line 36, through col. 14, line 26). Therefore, applicant's argument that Pleso's disclosure of downloading a device driver does not include downloading an application (Remarks p. 12) is unpersuasive.

Further, as noted in the rejections below, U.S. Patent No. 6,754,725 (Wright et al.) teaches that, in the context of providing drivers from a peripheral device through a USB interface to a host device, it has been known to similarly transfer other files (including program (application) files) relating to the peripheral device for separate installation on the host device or automatic installation during the driver installation (see col. 5, lines 63-67).

Art Unit: 2192

Claim Rejections - 35 USC § 102

 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

 Claims 1, 4, 5, 8-12, 15, 21-23, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,009,480 (Pleso).

As per claim 1, *Pleso* discloses: A method of installing a software program in a host device (see, e.g., col. 3, lines 18-31 (method for installing a peripheral device driver to a computer system)), said software program being required for said host device to communicate with a peripheral device (see, e.g., Abstract (a device driver which the computing system employs to communicate with the peripheral system)), said method comprising the steps of:

coupling said host device to said peripheral device (see, e.g., col. 3, lines 18-31 (connecting a peripheral device to a computer)) utilizing a USB serial interface, said peripheral device containing said software program stored in a memory device contained in said peripheral device (see, e.g., col. 3, lines 18-31 (the peripheral device including . . . a first memory . . . storing the peripheral device driver));

uploading said software program from said peripheral device to said host device over said USB serial interface (see, e.g., col. 3, lines 5-16 (the peripheral device downloads the device driver to the second memory . . .); col. 11, lines 55-65 (USB)); and

installing said software program in said host device (see, e.g., col. 3, lines 5-16 (the peripheral device downloads the device driver to the second memory . . .)) thereby allowing

Art Unit: 2192

communication between said host device and said peripheral device (see, e.g., Abstract (a device driver which the computing system employs to communicate with the peripheral system):

wherein said software program is an application for executing a functional operation associated with the operation of the peripheral device (see, e.g., col. 3, lines 18-31 (method for installing a peripheral device driver to a computer system); col. 13, line 36, through col. 14, line 26 (the device drivers may be JAVA applications).

As per claim 4, *Pleso* further discloses said host device and said peripheral device communicate with one another utilizing the USB specification (see, e.g., col. 11, lines 55-65).

As per claim 5, *Pleso* discloses: A method of installing a software program in a host device (see, e.g., col. 3, lines 18-31 (method for installing a peripheral device driver to a computer system)), said software program being required for said host device to communicate with a peripheral device (see, e.g., Abstract (a device driver which the computing system employs to communicate with the peripheral system)), said method comprising the steps of:

coupling said host device to said peripheral device (see, e.g., col. 3, lines 18-31 (connecting a peripheral device to a computer)) utilizing a USB serial interface, said peripheral device containing said software program stored in a memory device contained in said peripheral device (see, e.g., col. 3, lines 18-31 (the peripheral device including . . . a first memory . . . storing the peripheral device driver));

[determining] if said host device comprises said software program in said memory device contained in said host device (see, e.g., Figure 8 (step 252); col. 11, lines 7-10 (determines whether a peripheral device driver is needed)) [and if not,] uploading said software program from said peripheral device to said host device over said USB serial interface (see, e.g., col. 3,

Art Unit: 2192

lines 5-16 (the peripheral device downloads the device driver to the second memory . . .); col. 11, lines 55-65 (USB));

installing said software program in said host device (see, e.g., col. 3, lines 5-16 (the peripheral device downloads the device driver to the second memory . . .)) thereby allowing communication between said host device and said peripheral device (see, e.g., Abstract (a device driver which the computing system employs to communicate with the peripheral system));

wherein said software program is an application for executing a functional operation associated with the operation of the peripheral device (see, e.g., col. 3, lines 18-31 (method for installing a peripheral device driver to a computer system); col. 13, line 36, through col. 14, line 26 (the device drivers may be JAVA applications).

As per claim 8, *Pleso* further discloses said host device and said peripheral device communicate with one another utilizing the USB specification (see, e.g., col. 11, lines 55-65).

As per claim 9, *Pleso* discloses: A host device capable of communicating with any one of a plurality of peripheral devices utilizing a USB serial interface (see, e.g., col. 3, lines 18-31 (method for installing a peripheral device driver to a computer system); col. 11, lines 55-65 (USB)), said host device comprising:

a USB interface capable of defining said host device as a master device relative to said plurality of peripheral devices, (see, e.g., col. 3, lines 18-31 (connecting a peripheral device to a computer); col. 11, lines 55-65 (USB));

an application downloader for downloading the software driver of a given one of said plurality of peripheral devices, which is coupled to said host device via said USB serial interface

Art Unit: 2192

(see, e.g., col. 3, lines 5-16 (the peripheral device downloads the device driver to the second memory . . .); col. 11, lines 55-65 (USB)), and

an application installer for installing said software driver downloaded from said given one of said plurality of peripheral devices (see, e.g., col. 3, lines 5-16 (the peripheral device downloads the device driver to the second memory . . .)) so as to allow communication between said host device and said given one of said plurality of peripheral devices (see, e.g., Abstract (a device driver which the computing system employs to communicate with the peripheral system));

wherein said application is for executing a functional operation associated with the operation of the peripheral device (see, e.g., col. 3, lines 18-31 (method for installing a peripheral device driver to a computer system); col. 13, line 36, through col. 14, line 26 (the device drivers may be JAVA applications).

As per claim 10, *Pleso* further discloses said host device and said given one of said plurality of peripheral devices communicate with one another utilizing the USB specification (see, e.g., col. 11, lines 55-65).

As per claim 11, *Pleso* discloses a peripheral device capable of communicating with a host device utilizing a USB serial interface (see, e.g., col. 3, lines 18-31 (method for installing a peripheral device driver to a computer system); col. 11, lines 55-65 (USB)), the peripheral device comprising:

a memory device (see, e.g., col. 7, lines 49-51);

Art Unit: 2192

a USB interface capable of defining said peripheral device as a slave device relative to said host device, (see, e.g., col. 3, lines 18-31 (connecting a peripheral device to a computer); col. 11, lines 55-65 (USB));

an application in said memory device for communicating with said host device (see, e.g., col. 7, lines 49-51); and

an application uploader for uploading the software driver to said host device (see, e.g., col. 3, lines 5-16 (the peripheral device downloads the device driver to the second memory \dots); col. 11, lines 55-65 (USB));

wherein said application is for executing a functional operation associated with the operation of the peripheral device (see, e.g., col. 3, lines 18-31 (method for installing a peripheral device driver to a computer system); col. 13, line 36, through col. 14, line 26 (the device drivers may be JAVA applications).

Regarding claims 12 and 15, in addition to the disclosure applied above to claims 1 and 5, the device enumeration is part of the standard USB standard discussed above. See, e.g., Pleso at col. 12, lines 53-66.

Regarding claim 21, Pleso further discloses:

a software driver downloader for downloading the software driver of a given one of said plurality of peripheral devices, which is coupled to said host device via said USB serial interface (see, e.g., col. 3, lines 5-16 (the peripheral device downloads the device driver to the second memory . . .); col. 11, lines 55-65 (USB)), and

a software driver installer for installing said software driver downloaded from said given one of said plurality of peripheral devices (see, e.g., col. 3, lines 5-16 (the peripheral device

downloads the device driver to the second memory . . .)) so as to allow communication between said host device and said given one of said plurality of peripheral devices (see, e.g., Abstract (a device driver which the computing system employs to communicate with the peripheral system));

wherein said driver is associated with said given one of said plurality of peripheral devices which allows for communication between said host device and said given one of said plurality of peripheral devices (see, e.g., Abstract (a device driver which the computing system employs to communicate with the peripheral system)).

Regarding claim 22, *Pleso* further discloses a memory device for storing said downloaded driver until said application is downloaded (see, e.g., system memory 18in Fig. 1).

As per claim 23, *Pleso* further discloses said host device and said peripheral device communicate with one another utilizing the USB specification (see, e.g., col. 11, lines 55-65).

Regarding claim 25, Pleso further discloses:

a software driver in said memory device for communicating with said host device (see, e.g., col. 7, lines 49-51); and

a software driver uploader for uploading the software driver to said host device (see, e.g., col. 3, lines 5-16 (the peripheral device downloads the device driver to the second memory . . .); col. 11, lines 55-65 (USB));

wherein said driver is associated with said given one of said plurality of peripheral devices which allows for communication between said host device and said given one of said plurality of peripheral devices (see, e.g., Abstract (a device driver which the computing system employs to communicate with the peripheral system)).

Art Unit: 2192

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior at are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 18-20 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,009,480 (Pleso) and Srinivas Yarra, "USB OTG software frees dual-role handheld devices," May 16, 2002, EDN, pp. 83, 84, 86, and 88 (herinafter "Yarra").

Regarding claims 18-20 and 24, Although *Pleso* discloses the use of a USB interface for host-peripheral communications, *Pleso* is silent on the use of the USB On-The-Go (OTG) specification to define roles of host devices and peripheral devices. However, *Yarra* teaches the OTG specification as being a supplement to the USB standard and adding several unique advantages over the previous standard, including the determination of host and peripheral roles (first through a cable select mechanism and additionally through software negotiation of roles). *See*, *e.g.*, *Yarra* at pp. 83-84 (The A device is the default host and the B device is the default peripheral. Through the Host Negotiation Protocol, the host functions can be transferred to the B device). Therefore, because the USB OTG specification, (1) was a known supplement to the standard USB specification, (2) provides known tangible benefits over the USB specification, and (3) is being used for its intended purpose (i.e., determining the role of host and peripheral in serial communications), it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize such a USB OTG specification with the system of *Pleso*.

Art Unit: 2192

Claims 26-32 and 34-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over
 U.S. Patent No. 6.009.480 (Pleso) and U.S. Patent No. 6.754.725 (Wright et al.).

Regarding claim 26, in addition to the disclosure and teachings applied above to claim 25, although *Pleso* fails to expressly disclose the application loader uploading the application after a memory device contained in the host device stores the uploaded driver, *Wright et al.* teaches that, in the context of providing drivers from a peripheral device through a USB interface to a host device, it has been known to similarly transfer other files (including program (application) files) relating to the peripheral device for separate installation on the host device or automatic installation during the driver installation (see col. 5, lines 63-67). Therefore, it would have been obvious to one of ordinary skill in the art to incorporate such a subsequent application upload as per the driver and application installation system taught by Wright in order to gain the advantage of combining related installations for a peripheral device.

Regarding claim 27, Pleso discloses: A method of installing a driver/application in a host device (see, e.g., col. 3, lines 18-31 (method for installing a peripheral device driver to a computer system)), said driver/application being required for said host device to communicate with a peripheral device (see, e.g., Abstract (a device driver which the computing system employs to communicate with the peripheral system)), said method comprising the steps of:

coupling said host device to said peripheral device (see, e.g., col. 3, lines 18-31 (connecting a peripheral device to a computer)) utilizing a USB serial interface, said peripheral device containing said software program stored in a memory device contained in said peripheral device (see, e.g., col. 3, lines 18-31 (the peripheral device including . . . a first memory . . . storing the peripheral device driver));

Art Unit: 2192

uploading said driver from said peripheral device to said host device over said USB serial interface (see, e.g., col. 3, lines 5-16 (the peripheral device downloads the device driver to the second memory...); col. 11, lines 55-65 (USB)); and

installing said driver in said host device (see, e.g., col. 3, lines 5-16 (the peripheral device downloads the device driver to the second memory . . .)) thereby allowing communication between said host device and said peripheral device (see, e.g., Abstract (a device driver which the computing system employs to communicate with the peripheral system));

wherein said driver is associated with said peripheral device which allows for communication between said host device and said peripheral device (see, e.g., col. 3, lines 18-31 (method for installing a peripheral device driver to a computer system); col. 13, line 36, through col. 14, line 26 (the device drivers may be JAVA applications).

Although in the context discussed above, *Pleso* fails to expressly disclose the uploading and installing steps being carried out for a separate driver and application (the application being for executing a functional operation associated with the operation of the peripheral device), *Wright et al.* teaches that, in the context of providing drivers from a peripheral device through a USB interface to a host device, it has been known to similarly transfer other files (including program (application) files) relating to the peripheral device (for executing a functional operation associated with the operation of the peripheral device) for separate installation on the host device or automatic installation during the driver installation (see col. 5, lines 63-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate such additional application uploading and installing as per the teachings of Wright in order to gain the advantage of combining related installations for a peripheral device.

Art Unit: 2192

Regarding claim 28, in addition to the disclosure and teachings applied above to claim 25, although *Pleso* fails to expressly disclose the application loader uploading the application after a memory device contained in the host device stores the uploaded driver, *Wright et al.* teaches that, in the context of providing drivers from a peripheral device through a USB interface to a host device, it has been known to similarly transfer other files (including program (application) files) relating to the peripheral device for separate installation on the host device or automatic installation during the driver installation (see col. 5, lines 63-67). Therefore, it would have been obvious to one of ordinary skill in the art to incorporate such a subsequent application upload as per the driver and application installation system taught by Wright in order to gain the advantage of combining related installations for a peripheral device.

Regarding claim 29, *Pleso* further discloses said host device and said peripheral device communicate with one another utilizing the USB specification (see, e.g., col. 11, lines 55-65).

Regarding claim 30, in addition to the disclosure applied above to claim 27, the device enumeration is part of the standard USB standard discussed above. See, e.g., Pleso at col. 12, lines 53-66.

Regarding claim 31, *Pleso* further discloses a USB core of said host device determines a type of said peripheral device and a driver to communicate with said peripheral device (see, e.g., col. 12, lines 53-66).

Regarding claim 32, *Pleso* further discloses the determination of said peripheral device and said driver being performed in accordance with the USB specification (see, e.g., col. 12, lines 53-66).

Art Unit: 2192

Regarding claim 34, *Pleso* discloses: A method of installing a driver/application in a host device (see, e.g., col. 3, lines 18-31 (method for installing a peripheral device driver to a computer system)), said driver/application being required for said host device to communicate with a peripheral device (see, e.g., Abstract (a device driver which the computing system employs to communicate with the peripheral system)), said method comprising the steps of:

coupling said host device to said peripheral device (see, e.g., col. 3, lines 18-31 (connecting a peripheral device to a computer)) utilizing a USB serial interface, said peripheral device containing said software program stored in a memory device contained in said peripheral device (see, e.g., col. 3, lines 18-31 (the peripheral device including . . . a first memory . . . storing the peripheral device driver));

[determining] if said host device comprises said driver or application in said memory device contained in said host device (see, e.g., Figure 8 (step 252); col. 11, lines 7-10 (determines whether a peripheral device driver is needed)) [and if not,] uploading said driver or application from said peripheral device to said host device over said USB serial interface (see, e.g., col. 3, lines 5-16 (the peripheral device downloads the device driver to the second memory . . .); col. 11, lines 55-65 (USB));

installing said driver or application in said host device (see, e.g., col. 3, lines 5-16 (the peripheral device downloads the device driver to the second memory . . .)) thereby allowing communication between said host device and said peripheral device (see, e.g., Abstract (a device driver which the computing system employs to communicate with the peripheral system));

wherein said driver is associated with said peripheral device which allows for communication between said host device and said peripheral device (see, e.g., col. 3, lines 18-31

Art Unit: 2192

(method for installing a peripheral device driver to a computer system); col. 13, line 36, through col. 14, line 26 (the device drivers may be JAVA applications).

Although in the context discussed above, *Pleso* fails to expressly disclose the determining and installation steps being carried out for a separate driver and application (the application being for executing a functional operation associated with the operation of the peripheral device), *Wright et al.* teaches that, in the context of providing drivers from a peripheral device through a USB interface to a host device, it has been known to similarly transfer other files (including program (application) files) relating to the peripheral device (for executing a functional operation associated with the operation of the peripheral device) for separate installation on the host device or automatic installation during the driver installation (see col. 5, lines 63-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate such additional application determining and installing as per the teachings of Wright in order to gain the advantage of combining related installations for a peripheral device.

Regarding claim 35, in addition to the disclosure and teachings applied above to claim 25, although *Pleso* fails to expressly disclose the sequential determining regarding the application and driver, *Wright et al.* teaches that, in the context of providing drivers from a peripheral device through a USB interface to a host device, it has been known to similarly transfer other files (including program (application) files) relating to the peripheral device for separate installation on the host device or automatic installation during the driver installation (see col. 5, lines 63-67). Therefore, it would have been obvious to one of ordinary skill in the art to incorporate such sequential determining steps as per the driver and application installation

Art Unit: 2192

system taught by Wright in order to gain the advantage of combining related installations for a peripheral device.

Regarding claim 36, *Pleso* further discloses said host device and said peripheral device communicate with one another utilizing the USB specification (see, e.g., col. 11, lines 55-65).

Regarding claim 37, in addition to the disclosure applied above to claim 34, the device enumeration is part of the standard USB standard discussed above. See, e.g., Pleso at col. 12, lines 53-66.

Regarding claim 38, *Pleso* further discloses a USB core of said host device determines a type of said peripheral device and a driver to communicate with said peripheral device (see, e.g., col. 12, lines 53-66).

Regarding claim 39, *Pleso* further discloses the determination of said peripheral device and said driver being performed in accordance with the USB specification (see, e.g., col. 12, lines 53-66).

8. Claims 33 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,009,480 (Pleso), Srinivas Yarra, "USB OTG software frees dual-role handheld devices," May 16, 2002, EDN, pp. 83, 84, 86, and 88 (herinafter "Yarra"), and U.S. Patent No. 6,754,725 (Wright et al.).

Regarding claims 33 and 40, in addition to the disclosure and teachings applied above to claims 27 and 34, although *Pleso* discloses the use of a USB interface for host-peripheral communications, *Pleso* is silent on the use of the USB On-The-Go (OTG) specification to define roles of host devices and peripheral devices. However, *Yarra* teaches the OTG specification as

Art Unit: 2192

being a supplement to the USB standard and adding several unique advantages over the previous standard, including the determination of host and peripheral roles (first through a cable select mechanism and additionally through software negotiation of roles). See, e.g., Yarra at pp. 83-84 (The A device is the default host and the B device is the default peripheral. Through the Host Negotiation Protocol, the host functions can be transferred to the B device). Therefore, because the USB OTG specification, (1) was a known supplement to the standard USB specification, (2) provides known tangible benefits over the USB specification, and (3) is being used for its intended purpose (i.e., determining the role of host and peripheral in serial communications), it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize such a USB OTG specification with the system of Pleso.

Conclusion

Any inquiry concerning this communication or earlier communications from the
Examiner should be directed to Eric B. Kiss whose telephone number is (571) 272-3699. The
Examiner can normally be reached on Tue. - Fri., 7:00 am - 4:30 pm. The Examiner can also be
reached on alternate Mondays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Tuan Dam, can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Art Unit: 2192

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eric B. Kiss/ Eric B. Kiss Primary Examiner, Art Unit 2192